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TOWNSEND AND TOWNSEND AND CREW LLP DAVID N. SLONE
TWO EMBARCADERO CENTER, 8TH FLOOR
SAN FRANCISCO, CA 94111-3834

UNITED STATES DEPARTMENT OF COMMERCE Patent and Trademark Office ASSISTANT SECRETARY AND COMMISSIONER OF PATENTS AND TRADEMARKS Washington, D.C. 20231

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UNITED STATES PATENT AND TRADEMARK OFFICE NOTICE OF RECORDATION OF ASSIGNMENT DOCUMENT

THE ENCLOSED DOCUMENT HAS BEEN RECORDED BY THE ASSIGNMENT DIVISION OF THE U.S. PATENT AND TRADEMARK OFFICE. A COMPLETE MICROFILM COPY IS AVAILABLE AT THE ASSIGNMENT SEARCH ROOM ON THE REEL AND FRAME NUMBER REFERENCED BELOW.

PLEASE REVIEW ALL INFORMATION CONTAINED ON THIS NOTICE. THE INFORMATION CONTAINED ON THIS RECORDATION NOTICE REFLECTS THE DATA PRESENT IN THE PATENT AND TRADEMARK ASSIGNMENT SYSTEM. IF YOU SHOULD FIND ANY ERRORS OR HAVE QUESTIONS CONCERNING THIS NOTICE, YOU MAY CONTACT THE EMPLOYEE WHOSE NAME APPEARS ON THIS NOTICE AT 703-308-9723. PLEASE SEND REQUEST FOR CORRECTION TO: U.S. PATENT AND TRADEMARK OFFICE, ASSIGNMENT DIVISION, BOX ASSIGNMENTS, CG-4, 1213 JEFFERSON DAVIS HWY, SUITE 320, WASHINGTON, D.C. 20231.

RECORDATION DATE: 07/25/2003

REEL/FRAME: 013828/0575

NUMBER OF PAGES: 11

· BRIEF: ASSIGNMENT OF ASSIGNOR'S INTEREST (SEE DOCUMENT FOR DETAILS).

ASSIGNOR:

NETWORK PHOTONICS, INC.

DOC DATE: 06/17/2003

ASSIGNEE:

PTS CORPORATION, A DELAWARE CORPORATION

101 INNOVATION DRIVE

SAN JOSE, CALIFORNIA 95134

SERIAL NUMBER: 10148710 FILING DATE: 11/18/2002

PATENT NUMBER: ISSUE DATE:

SERIAL NUMBER: 10278182 FILING DATE: 10/21/2002

PATENT NUMBER: ISSUE DATE:

SERIAL NUMBER: 09551256 FILING DATE: 04/18/2000

PATENT NUMBER: ISSUE DATE:

SERIAL NUMBER: 09658158 FILING DATE: 09/08/2000

PATENT NUMBER: ISSUE DATE:

OPR/ASSIGNMENTS

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SERIAL NUMBER: 09747064 FILING DATE: 12/20/2000

PATENT NUMBER: ISSUE DATE:

SERIAL NUMBER: 10241105 FILING DATE: 09/10/2002

PATENT NUMBER: ISSUE DATE:

SERIAL NUMBER: 09706489 FILING DATE: 11/03/2000

PATENT NUMBER: ISSUE DATE:

SERIAL NUMBER: 10076182 FILING DATE: 02/12/2002

PATENT NUMBER: ISSUE DATE:

SERIAL NUMBER: 10171434 FILING DATE: 06/12/2002

PATENT NUMBER: ISSUE DATE:

SERIAL NUMBER: 60363724 FILING DATE: 03/11/2002

PATENT NUMBER: ISSUE DATE:

SERIAL NUMBER: 10243924 FILING DATE: 09/12/2002

PATENT NUMBER: ISSUE DATE:

SERIAL NUMBER: 09782882 FILING DATE: 02/13/2001

PATENT NUMBER: ISSUE DATE:

SERIAL NUMBER: 09859069 FILING DATE: 05/15/2001

PATENT NUMBER: ISSUE DATE:

SERIAL NUMBER: 10161838 FILING DATE: 06/03/2002

PATENT NUMBER: ISSUE DATE:

SERIAL NUMBER: 60252784 FILING DATE: 11/22/2000

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SERIAL NUMBER: 09799916 FILING DATE: 03/05/2001

PATENT NUMBER: ISSUE DATE:

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PATENT NUMBER: ISSUE DATE:

SERIAL NUMBER: 09899002 FILING DATE: 07/03/2001

PATENT NUMBER: ISSUE DATE:

SERIAL NUMBER: 09899001 FILING DATE: 07/03/2001

PATENT NUMBER: ISSUE DATE:

SERIAL NUMBER: 10300438 FILING DATE: 11/19/2002

PATENT NUMBER: ISSUE DATE:

SERIAL NUMBER: 10087040 FILING DATE: 02/28/2002

PATENT NUMBER: ISSUE DATE:

SERIAL NUMBER: 09899014 FILING DATE: 07/03/2001

PATENT NUMBER: ISSUE DATE:

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013828/0575 PAGE 3

SERIAL NUMBER: 09898988 FILING DATE: 07/03/2001

PATENT NUMBER: ISSUE DATE:

SERIAL NUMBER: 09899104 FILING DATE: 07/06/2001

PATENT NUMBER: ISSUE DATE:

SERIAL NUMBER: 09880230 FILING DATE: 06/12/2001 PATENT NUMBER: 6600591 ISSUE DATE: 07/29/2003

SERIAL NUMBER: 09954662 FILING DATE: 09/12/2001

PATENT NUMBER: TSSUE DATE:

SERIAL NUMBER: 10216600 FILING DATE: 08/09/2002

PATENT NUMBER: ISSUE DATE:

SERIAL NUMBER: 09941325 FILING DATE: 08/28/2001

• PATENT NUMBER: ISSUE DATE:

SERIAL NUMBER: 10093844 FILING DATE: 03/08/2002

PATENT NUMBER: ISSUE DATE:

SERIAL NUMBER: 10279388 FILING DATE: 10/23/2002

PATENT NUMBER: ISSUE DATE:

SERIAL NUMBER: 09992087 FILING DATE: 11/12/2001

PATENT NUMBER: ISSUE DATE:

SERIAL NUMBER: 09992849 FILING DATE: 11/12/2001

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SERIAL NUMBER: 10118070 FILING DATE: 04/05/2002

PATENT NUMBER: ISSUE DATE:

SERIAL NUMBER: 10099392 FILING DATE: 03/13/2002

PATENT NUMBER: ISSUE DATE:

SERIAL NUMBER: 10098805 FILING DATE: 03/13/2002

PATENT NUMBER: ISSUE DATE:

SERIAL NUMBER: 10306826 FILING DATE: 11/26/2002

PATENT NUMBER: ISSUE DATE:

SERIAL NUMBER: 10808789 FILING DATE:

PATENT NUMBER: ISSUE DATE:

SERIAL NUMBER: 10095794 FILING DATE: 03/11/2002

PATENT NUMBER: ISSUE DATE:

SERIAL NUMBER: 10093843 FILING DATE: 03/08/2002

PATENT NUMBER: ISSUE DATE:

SERIAI, NUMBER: 10150810 FILING DATE: 05/17/2002

PATENT NUMBER: ISSUE DATE:

013828/0575 PAGE 4

OPR/ASSIGNMENTS

FILING DATE: 04/19/2002 SERIAL NUMBER: 10126189 ISSUE DATE: PATENT NUMBER: FILING DATE: 03/28/2003 SERIAL NUMBER: 10401416 ISSUE DATE: PATENT NUMBER: SERIAL NUMBER: 10147181 FILING DATE: 05/15/2002 ISSUE DATE: PATENT NUMBER: FILING DATE: 09/12/2002 SERIAL NUMBER: 10242213 ISSUE DATE: PATENT NUMBER: FILING DATE: 09/30/2002 SERIAL NUMBER: 10262404 ISSUE DATE: PATENT NUMBER: SERTAL NUMBER: 09442061 FILING DATE: 11/16/1999 ISSUE DATE: 12/31/2002 PATENT NUMBER: 6501877 FILING DATE: 12/20/2000 SERIAL NUMBER: 09745760 ISSUE DATE: 04/01/2003 PATENT NUMBER: 6542657 FILING DATE: 12/20/2000 • SERIAL NUMBER: 09745459 ISSUE DATE: 03/18/2003 PATENT NUMBER: 6535664 FILING DATE: 07/13/2000 SERIAL NUMBER: 09615300 ISSUE DATE: 09/10/2002 PATENT NUMBER: 6449096 FILING DATE: 09/26/2000 SERIAL NUMBER: 09669758 ISSUE DATE: 02/11/2003 PATENT NUMBER: 6517734 FILING DATE: 12/21/2000 SERIAL NUMBER: 09748687 ISSUE DATE: 12/03/2002 PATENT NUMBER: 6490089 FILING DATE: 06/22/1981 SERIAL NUMBER: 06275888 ISSUE DATE: 04/26/1983 PATENT NUMBER: 4381387 SERIAL NUMBER: 09837362 FILING DATE: 04/18/2001 PATENT NUMBER: 6525352 ISSUE DATE: 02/25/2003 FILING DATE: 07/03/2001 SERIAL NUMBER: 09899000 PATENT NUMBER: 6535319 ISSUE DATE: 03/18/2003 SERIAL NUMBER: 09941998 FILING DATE: 08/28/2001

ISSUE DATE: 08/27/2002

SHARON LATIMER, EXAMINER ASSIGNMENT DIVISION OFFICE OF PUBLIC RECORDS

PATENT NUMBER: 6439728

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Attorney Docket No. 019930-000000US

Form PTO-1595 Recordation Form PTO-1595 Recordation Form PMB No. 0851-9027 (exp. 5/31/2002) PATENTS	
DMB No., 0851-0027 (axp. 5/31/2002)	ONL;
Tab settings ⇔⇔⇔ ▼ ▼ ▼ ▼ To the Honorable Commissioner of Patents and Trademarks.	Please record the attached original documents or copy thereof
Name of conveying party(les):	Name and address of receiving party(ies)
Network Photonics, Inc.	Name: PTS Corporation
Additional name(s) of conveying party(ies) attached? Yes No.	Internal Address: A Delaware Corporation
3. Nature of conveyance:	Street Address: 101 Innovation Drive
☐ Assignment ☐ Merger	City: San Jose State: CA ZIP: 95134
Security Agreement Change of Name	
Other:	Additional name(s) and addrass(es) attached? ☐ Yes ☒ No
Execution Date: June 17, 2003	
 Application number(s) or patent number(s): 	
If this document is being filed together with a new application, th	e execution date of the application is:
A. Patent Application No(s):	B. Patent No(s):
10/148,710	6,501,877
10/278,182	6,542,657
09/551,256	6,535,664
09/658,158	6,449,096
09/747,064	6,517,734
	ched? ⊠ Yes □ No
Name and address of party to whom correspondence concerning document should be mailed;	Total number of applications and patents involved: 55
Name: David N. Slone	7. Total fee (37 CFR 3.41):\$2200.00
TOWNSEND AND TOWNSEND AND CREW LLP	☐ Enclosed
Two Embarcadero Center, 8 th Floor San Francisco, California 94111-3834	☐ Authorized to be charged to deposit account
(650) 326-2400	
	8. Deposit account number: 20-1439
	(Altrach duplicate copy of this page if paying by daposit account)
SEU YON OD	THIS SPACE
9. Statement and signature.	
To the best of my knowledge and belief, the foregoing information is a true copy of the original document.	tion is true and correct and any attached copy
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David N. Slone	10 26 one July 25, 2003
Atty. Reg. No. 28,572	Signature Date
	over sheet attachments and documents: 11

Mail documents to be recorded with required cover sheet information to:

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JUL.25.2003 3:11

TTC-PA 650-326-2422

NO.272 P.5/14

Form PTO-1595 Recordation Form Cover Sheet Patents Only Page 2

- Additional name(s) of conveying party(ies):
 (Continued from Page 1)
- Additional name(s) and address(es) of receiving party(les): (Continued from Page 1)
- Additional application number(s) or patent number(s): (Continued from Page 1)

B. Patent No.(s) 6,490,089 6,381,387 6,525,352 6,535,319 6,439,728

EXHIBIT 3.02(b)

PATENT ASSIGNMENT

ASSIGNMENT AND TRANSFER OF PATENTS

WHEREAS, Network Photonics, Inc., a Delaware corporation, with offices at 4775 Walnut Street, Boulder, Colorado 80301 ("Assignor") owns certain patent applications and/or registrations, as listed in Exhibit A attached hereto and incorporated herein by this reference ("Patents"); and

WHEREAS, PTS Corporation, a Delaware corporation, with offices at 101 Innovation Drive, San Jose, California 95134 ("Assignee"), desires to acquire all of the right, title and interest of Assignor in, to and under the Patents;

WHEREAS, Assignor and Assignee have entered into a certain Asset Purchase Agreement, dated as of June 17, 2003 ("Assignment Agreement"), assigning, among other things, all right, title and interest in, to and under the Patents and in, to and under the registrations for same from Assignor to Assignee;

NOW, THEREFORE, for good and valuable consideration described in the Assignment Agreement, the receipt and sufficiency of which are hereby acknowledged, Assignor does hereby irrevocably sell, assign, transfer and convey unto Assignee all of its right, title and interest in and to the Patents, including all patent applications and divisions, continuations, continuations-in-part, reexaminations, substitutions, reissues, extensions and renewals of the applications and registrations for the Patents (and the right to apply for any of the foregoing); all rights to causes of action and remedies related thereto (including, without limitation, the right to sue for past, present or future infringement, misappropriation or violation of rights related to the foregoing); and any and all other rights and interests arising out of, in connection with or in relation to the Patents throughout the universe, including without limitation all foreign counterparts and foreign equivalents of any of the foregoing.

Assignor authorizes and requests the patent officials in the United States and in any and all foreign jurisdictions to issue any and all letters patent and foreign counterparts or equivalents thereof to PTS Corporation, as assignee of the entire interest of Assignor therein, and covenants that Assignor has full right to convey the entire interest herein assigned and that Assignor has not executed and will not execute any agreements in conflict herewith.

Assignor further agrees, for itself, its successors and assigns, to execute such further documents and to perform such further lawful acts as may reasonably be required to effectuate this assignment.

IN WITNESS WHEREOF, Assignor has caused this assignment to be duly executed by an authorized officer on this 17th day of June, 2003.

Network Photonics, Inc.	
By: Ith feet Name: Steve Centrals Title: Mendent of Ell	
STATE OF <u>Colorado</u>) COUNTY OF <u>Boulder</u>) ss.	
On June 17, 2003, before me, the undersigned	notary public in and for said County and
State, personally appeared Steve Georgis	
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personally known to m	ne [or] asis of satisfactory evidence
proved to me on the or	ion or outlinuotory ovidence
to be the person(s) whose name(s) Steve Georgie	5_ subscribed to the within instrument and
acknowledged to me that Steve Georgis execution	
authorized capacity(ies) and that, by his	
the entity(ies) upon behalf of which the person(s) acted	d executed the instrument.
Witness my hand and official seal.	
SANO SANO OTAR OF COURT My Commission Expires 04/07/04	My commission expires on April 7, 2004 Kothy L. Sanderson 4775 Walnut Street Boulder, CO 80301

EXHIBIT A

PATENTS

TTC Ref Country ATTY(s) Handling	Title	Inventor	Application No.	Filing Date	Patent No.	Issue Dat
019930-000100 US	Wavelength Router	Weverka, Robert T.	09/442061	11/16/1999	6501877	12/31/200
(DNS)		Roth, Richard S.				
019930-000110 CA	Wavelength Router	Weverka, Robert T.	2389622	11/14/2000		
(DNS)		Georgis, Steven P. Roth, Richard S.	,			
019930-000110 CN	Wavelength Router	Weverka, Robert T.	00815769.3	11/14/2000		
(DNS)		Georgis, Steven P. Roth, Richard S.				
019930-000110 EP	Wavelength Router	Weverka, Robert T.	00983709.7	11/14/2000		
(DNS)		Georgis, Steven P. Roth, Richard S.				
019930-000110 JP	Wavelength Router	Weverka, Robert T.	2001-538854	11/14/2000		
(DNS)		Georgis, Steven P. Roth, Richard S.				
019930-000110 PC	Wavelength Router	Weverka, Robert T.	00/31448	11/14/2000		
(DNS)		Georgis, Steven P. Roth, Richard S.				
019930-000110 US	Wavelength Router	Weverka, Robert T.	10/148710	5/29/2002		
(DNS)		Georgis, Steven P. Roth, Richard S.				
019930-000120 US	Wavelength Router	Weverka, Robert T.	10/278182	10/21/2002		
(DNS)		Georgis, Steven P.				
019930-000200	Wavelength Monitor for WDM	Roth, Richard S. Georgis, Steven P.	2406369	3/22/2001		
CA (DNS)	Systems	Weverka, Robert T.				
019930-000200 CN	Wavelength Monitor for WDM Systems	Georgis, Steven P.	1811343.5	3/22/2001		
(DNS)		Weverka, Robert T.				
019930-000200 EP	Wavelength Monitor for WDM Systems	Georgis, Steven P.	01928317.5	3/22/2001		
(DNS)		Weverka, Robert T.	2001 576415	2/22/2003	<u> </u>	
019930-000200 JP	Wavelength Monitor for WDM Systems	Georgis, Steven P.	2001-576415	3/22/2001		
(DNS)		Weverka, Robert T.				1

TTC Ref Country	Title	Inventor	Application No.	Filing Date	Patent No.	Issue Date
ATTY(s) Handling 019930-000940	Title Difffraction Grating With Reduced	Fabiny, Larry	10/241105	9/10/2002	Tatellerion	133de Date
US	Polarization-Dependent Loss	•				
PMB (DNS)		Sarto, Tony				
019930-001000 PC	Reduction of Polarization-Dependent Loss from Grating Used in Double-	Fabiny, Larry	PCT/US01/47565	11/2/2001		
DJG PMB (DNS)	Pass Configuration					
019930-001000	Reduction of Polarization-Dependent	Fabiny, Larry	09/706489	11/3/2000		
US	Loss from Grating Used in Double- Pass Configuration					
DJG PMB (DNS)	Fass Configuration					
019930-001010	Reduction of Polarization Dependent	Fabiny, Larry	10/076182	2/12/2002		
US	Loss from a Grating Used in Double Pass Configuration					
PMB (DNS)	Pass Configuration					
019930-001020 US	Reduction of Polarization-Dependent Loss in Double Pass Configurations	Silveira, Paulo E. X.	10/171434	6/12/2002		-
PMB (DNS)		Sarto, Tony				
		Fabiny, Larry	1		<u> </u>	
		Voitel, Marko			}	
019930-001100 US	Variable Wavelength Attenuator for Spectral Grooming Using Micromirror Routing	Weaver, Samuel P.	60/363724	3/11/2002		
PMB (DNS)		DV Commod P	PCT/US03/07902	3/11/2003		
019930-001110 PC	Variable Wavelength Attenuator for Spectral Grooming and Dynamic	Weaver, Samuel P.	FC1/0303/0/902	3/11/2003		
РМВ (DNS)	Channel Equalization Using Micromirror Routing	Sarto, Andrew W.				
019930-001110 US	Variable Wavelength Attenuator for Spectral Grooming Using	Weaver, Samuel P.	10/243924	9/12/2002		
PMB (DNS)	Micromirror Routing	Sarto, Anthony W.				
019930-001200 US	Focal Length Disperation Compensation for Field Curvature	Weaver, Samuel P.	09/782882	2/13/2001		
PMB (DNS)		Cahill, Raymond F.				
019930-001300 PC DJG (DNS)	Athermalization of a Wavelength Routing Element	Wendland Jr., R.G.	01/24242	7/31/2001		
019930-001300 US	Athermalization of a Wavelength Routing Element	Wendland Jr., R.G.	09/630817	8/2/2000	6381387	4/30/200
DJG (DNS)						
019930-001400 US	Hidden Flexure Ultra-Planar Optical Routing Element	Michalicek, M. A.	09/859069	5/15/2001		
RTB (DNS)						
019930-002000 US	Optical Routing Elements	Wendland, Jr., R.G.	10/161838	6/3/2002		
RTB (DNS)						
019930-002200 US	Method to Reduce Release Time of Micromachined Devices	Muller, Lilac	60/252784	11/22/2000		
PMB (DNS)		Staple, Bevan				1
019930-002210 US	Method to Reduce Release Time of Micromachined Devices	Muller, Lilac	09/837362	4/18/2001	6525352	2/25/200
PMB (DNS)		Staple, Bevan				<u></u>

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TTC Ref Country ATTY(s) Handling	Title	Inventor	Application No.	Filing Date	Patent No.	Issue Date
019930-000200	Wavelength Monitor for WDM	Georgis, Steven P.	PCT/US01/09442	3/22/2001		
PC	Systems	Weverka, Robert T.				
(DNS)	Wavelength Monitor for WDM	Georgis, Steven P.	09/551256	4/18/2000		
019930-000200 US	Systems .		07/351255	7/10/2000		
(DNS)		Weverka, Robert T.		5/0/0000		
019930-000500 US	Linear Optical Beam Translator for Optical Routing	Weaver, Samuel P.	09/658158	9/8/2000		ı
PMB (DNS)		Weverka, Robert T.	1			ı
		Roth, Richard S.				
019930-000510 PC	Linear Optical Beam Translator For Optical Routing	Weaver, Samuel P.	01/28309	9/7/2001		
PMB (DNS)		Weverka, Robert T.				
		Roth, Richard S.				
019930-000600 PC	Binary Switch for an Optical Wavelength Router	Anderson, Robert L.	01/50524	12/20/2001		
PMB (DNS)						
019930-000600 US	Binary Switch for an Optical Wavelength Router	Anderson, Robert L.	09/745760	12/20/2000	6542657	4/1/2003
PMB (DNS)						
019930-000700 PC	1X2 Optical Wavelength Router	Anderson, Robert L.	01/50441	12/20/2001		
PMB (DNS)						
019930-000700 US	1X2 Optical Wavelength Router	Anderson, Robert L.	09/745459	12/20/2000	6535664	3/18/2003
PMB (DNS)						
019930-000800 US	Wavelength Router with Staggered Input-Output Fibers	Anderson, Robert L.	09/747064	12/20/2000		<u> </u>
PMB (DNS)		Weaver, Samuel P.				
019930-000900 US	Diffraction Grating with Reduced Polarization-Dependent Loss	Fabiny, Larry	09/615300	7/13/2000	6449096	9/10/2002
PMB (DNS)	·	Sarto, Tony				
019930-000910 US	Grating Fabrication Process Using Combined Crystalline- Dependent &	Muller, Lilac	09/669758	9/26/2000	6517734	2/11/200:
PMB (DNS)	Crystalline-Independent Etching	Amett, Kenneth E.				
		Fabiny, Larry				
		Pister, Kristofer S.				
019930-000920 US	Diffraction Grating with Reduced Polarization-Dependent Loss	Fabiny, Larry	09/748687	12/21/2000	6490089	12/3/200:
PMB (DNS)						
019930-000930 PC	Diffraction Grating With Reduced Polarization-Dependent Loss	Fabiny, Larry	01/22229	7/11/2001		
PMB (DNS)		Sarto, Tony				'
		Muller, Lilac				1
		Arnett, Kenneth E.			1	
	·	Pisterf, Kristofer			l	

TTC Ref Country ATTY(s) Handling	Title	Inventor	Application No.	Filing Date	Patent No.	Issue Date
019930-002300 US	Method for Reducing Leaching in Metal-Coated MEMS	Staple, Bevan	09/799916	3/5/2001		
PMB (DNS)		Miller, David				
		Muller, Lilac				
019930-002400 US	Optical Surface-Mount Lens Cell	Anderson, David Paul	09/899013	7/3/2001		
PMB (DNS)						
019930-002500 US	MEMS-Based, Non-Contacting, Free-Space Optical Switch	Staple, Bevan	09/899002	7/3/2001		
PMB (DNS)		Roth, Richard S.	,			
019930-002600 US	Free-Space Optical Wavelength Routing Elements Based on Stepwise	Buzzetta, Victor	09/899000	7/3/2001	6535319	3/18/2003
PMB (DNS)	Controlled Tilting Mirrors	Staple, Bevan	·			
		Marinelli, David				
019930-002700 US	Two-Dimensional Free-Space Optical Wavelength Routing Element Based on Stepwise Controlled Tilting	Buzzetta, Victor	09/899001	7/3/2001		
PMB (DNS)	Міттогѕ	<u> </u>	10/300438	11/19/2002	 	
019930-002710 US PMB (DNS)	Two-Diminsional Free-Space Optical Wavelength Routing Element Based on Stepwise Controlled Tilting Mirrors	Buzzetta, Victor	10/300438	11/19/2002		
019930-002800 US	Systems & Methods for Overcoming Stiction	Miller, David	10/087040	2/28/2002		
DMH (DNS)		Muller, Lilac				
		Anderson, Robert L.				
019930-003000 US	Methods & Appartus for Providing a Multi-Stop Micromirror	Anderson, David Paul	09/899014	7/3/2001		
DMH (DNS)						}
019930-003100 US	Systems & Methods for Overcoming Stiction Using a Lever	Anderson, David Paul	09/898988	7/3/2001		
DMH (DNS)						
019930-003200 US	Bistable Mirror with Contactless Stops	Muller, Lilac	09/899004	7/3/2001		
PMB (DNS)					}	
019930-003500 US	Micromirror Array Having Adjustable Angles	Anderson, Robert L.	09/880230	6/12/2001		
PMB (DNS)		Staple, Bevan Roth, Richard S.				
019930-003600 US	Dual-Wave Optical Shared Protection Ring	Wahler, Ronald A.	09/954662	9/12/2001		
PMB (DNS)		Bortolini, Edward J.				
019930-003700 US	Method & Apparatus for Protecing Wiring & Integrated Circuit Device	Anderson, Robert L.	10/216600	8/9/2002		
WFV (DNS)		Reyes, David				

TTC Ref Country ATTY(s) Handling	Title	Inventor	Application No.	Filing Date	Patent No.	Issue Date
019930-004000 US	MEMS Die Holder	Roberts, Joseph	09/941325	8/28/2001		
PMB (DNS) 019930-004400 US PMB (DNS)	Multimirror Stack for Vertical Integration of MEMS Devices in Two-Position Retroreflectors	Copeland, Frederick	09/941998	8/28/2001	6439728	8/27/2002
019930-004500 US PMB (DNS)	Optical Wavelength Cross Connect Architectures Using Wavelength Routing Elements	Bortolini, Edward J. Barthel, Dirk Weverka, Robert T. Iraschko, Rainer R.	10/093844	3/8/2002		
		Morley, George D.				
019930-004510 PC PMB (DNS)	Optical Wavelength Cross Connect Architectures Using Wavelength Routing Elements and Methods For Performing In-Service U	Bortolini, Edward J. Barthel, Dirk Weverka, Robert T. Iraschko, Rainer R. Morley, George D.	PCT/US03/07422	3/10/2003		
019930-004510 US PMB (DNS)	Optical Wavelength Cross Connect Architectures Using Wavelength Routing Elements	Weverka, Robert T.	10/279388	10/23/2002		
019930-005500 US PMB (DNS)	Wavelength Router with a Transmissive Dispersive Element	Fabiny, Larry	09/992087	11/12/2001		
019930-005600 US PMB (DNS)	High Efficiency, Low Polarization Depdendent Loss, Lamellar Diffraction-Grating Profile & Production Process	Fabiny, Larry Arnett, Kenneth E.	09/992849	11/12/2001		
019930-005700 US PMB (DNS)	Survivable Ring Transmission System with Multiple Protection Classes	Iraschiko, Rainer R. MacGregor, Michael H Morley, George David Stamatelakis, Demetr Wahler, Ronald A.	10/118070	4/5/2002		
019930-005800 US	One-to-M Wavelength Routing Element	Cizek, Nicholas C.	10/099392	3/13/2002		
PMB (DNS)		Weaver, Samuel Paul				
019930-005900 US G2B PMB (DNS)	Two-By-Two Wavelength Routine Element Using One Two- Position MEMS Mirrors	Cizek, Nicholas C.	10/098805	3/13/2002		
019930-006000 US	Method for Sub Network Connection Protection in All Optical Networks	Weverka, Robert T.	10/306826	11/26/2002		
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19930-096100 Satus of MEMS Based Deveies Staple, Bevan 10/080789 2/21/2002		Title	Inventor	Application No.		Patent No.	Issue Date
O19930-007300 PC MB (DNS) Tunable DWDM Demultiplexer Christopher S., Alaimo Bortolini, Edward J. DeFrancesco, Marc Honea, Keith Marinelli, David Mechels, Steven Rice, James Weverka, Robert T. Kiruluta, Andrew J. M. Wood, Christopher Stephen Kaliskl, Robert W. DeFrancesco, Marc Honea, Keith Marinelli, David Mechels, Steven Rice, James Weverka, Robert T. Kiruluta, Andrew J. M. Wood, Christopher Stephen Kaliskl, Robert W. DeFrancesco, Marc Honea, Keith Marinelli, David Mechels, Steven Rice, James Weverka, Robert T. Kiruluta, Andrew J. M. DeFrancesco, Marc Honea, Keith Marinelli, David Mechels, Steven Rice, James Weverka, Robert T. Kiruluta, Andrew J. M. DeFrancesco, Marc Honea, Keith Marinelli, David Mechels, Steven Rice, James Weverka, Robert T. Kiruluta, Andrew J. M. Defrancesco, Marc Honea, Keith Marinelli, David Mechels, Steven Rice, James Weverka, Robert T. Kiruluta, Andrew J. M. Defrancesco, Marc Honea, Keith Marinelli, David Mechels, Steven Rice, James Weverka, Robert T. Kiruluta, Andrew J. M. Defrancesco Marc Honea, Keith Marinelli, David Mechels, Steven Rice, James Weverka, Robert T. Weverka	930-006100	Methods for Affirming Switched				Tatent No.	13306 Date
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DeFrancesco, Marc Honea, Keith Marinelli, David Mechels, Steven Rice, James Weverka, Robert T. Kiruluta, Andrew J. M. Wood, Christopher Stephen Kaliskl, Robert W.	B (DNS)		Bortolini, Edward J.				
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019930-008100 Optical Routing Mechanism With US Integral Fiber Input/Output PMB (DNS) Arrangement on MEMS Die KAPLAN, MICHAEL 10/401416 3/28/2003		Integral Fiber Input/Output	KAPLAN, MICHAEL	10/401416	3/28/2003		

TTC Ref Country ATTY(s) Handling	Title	Inventor	Application No.	Filing Date	Patent No.	Issue Date
019930-008200 US	Variable-Density Optical Cross Connect Architectures & Upgrades	Weverka, Robert T.	10/147181	5/15/2002		
PMB (DNS)		Bortolini, Edward J.				
		Urie, Richard W.			<u> </u>	,
		Clark, Phillip				
019930-008300 US PMB (DNS)	Surfactant-Enhanced Protection of Micromechanical Components from Galvanic Degradation	Staple, Bevan	10/242213	9/12/2002		
019930-008400 US PMB (DNS)	Floating Entrance Guard for Preventing Electrical Short Circuits	Miller, David	10/262404	9/30/2002		
019930-008800 US PMB (DNS)	Equipment Monitoring Techniques for Optical Switching & Wavelength Switching Devices & Systems					